



Laboratory for Biochemistry and Proteomics

Quarterly Newsletter: March 2013



Darie Lab to Present at ASMS Meeting

The Darie Lab will present at the American Society for Mass Spectrometry Meeting (ASMS), June 9 -15. ASMS sponsors the Annual Conference on Mass Spectrometry and Allied Topics attended by more than 6,500 scientists. Approximately 3,000 papers are presented as posters and talks. Darie Lab Posters include: including: A TransOmics study of the saliva of children with autism spectrum disorder using high definition mass spectrometry, Mass spectrometry analysis of NXS/T glycosylation sites in recombinant glycoproteins, Proteomic investigation of saliva from children with Autism Spectrum Disorder and matched controls during circadian rhythmicity, Proteomic investigation of sera and saliva from children with Autism Spectrum Disorder and matched controls, Proteomic investigation of the mechanism of infection of Hepatitis B virus (HBV) in HepaRG cells, . Presenting authors: Katherine M. Beglinger, Armand G. Ngounou Wetie, Kelly L. Wormwood, Jarrod W. Mattingly, Urmi Roy, Jeanne P. Ryan, Alisa G. Woods, Costel C. Darie, Joanne Connolly, Armand G. Ngounou Wetie, Cristian Cojocariu, Lee Gethings, Janet Hammond, Izabela Sokolowska, Urmi Roy, Norica Branza-Nichita and Catalina Petrareanu. Our presentations include collaborators from Waters Corporation, UK, SUNY Plattsburgh, NY and the Institute of Biochemistry of the Romanian Academy in Bucharest.

Sokolowska Wins Shipley Graduate Award

Izabela Sokolowska, a graduate student in the Biochemistry and Proteomics lab led by Dr. Darie won the Shipley Graduate Student Award. The award was announced at the First Annual Chemistry Graduate Student Symposium, held in early December 2012, at Clarkson University. The award is given to one graduate student with outstanding achievements in research, service and teaching.

Ms. Sokolowska started working towards her PhD on Tumor Differentiation Factor (TDF), a new pituitary-derived molecule. She also works on developing new proteomics approaches for biomarker discovery.



Woods to Speak at Autism Conference

Alisa G Woods, Ph.D., MS, Director, Autism Research Program, Laboratory for Biochemistry and Proteomics, Clarkson University, will be speaking at the ICare4Autism International Conference at Albert Einstein college of Medicine, June 5th, 2013. The conference will have leading experts from biomedical and educational/behavioral fields speaking on the latest advances in autism research, education and policies. It will be a gathering place for leading international autism researchers to work in collaboration, and converse about the latest autism education, research, treatments and best practices. It will be sponsored by Albert Einstein College of Medicine and co-sponsored by Shema Kolainu-Hear Our Voices and Montefiore Medical Center.

Woods will give the following presentation: *Protein Biomarkers in Autism Spectrum Disorder*. If you are interested in attending you can register at: <http://www.icare4autism.org/events/2013-autism-conference/>



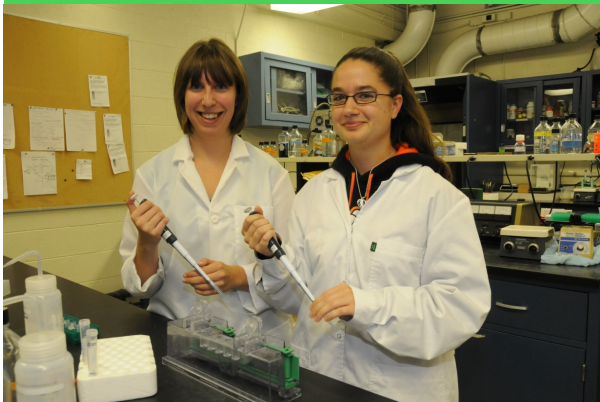
Ngounou Wetie wins travel Award

Last year Armand attended, from November 8th to November 9th 2012, the American Society for Mass Spectrometry (ASMS) fall workshop in Boston, Massachusetts. His participation in this workshop was possible thanks to a travel stipend that Armand received from the ASMS. The workshop is usually limited to 500 participants from all around the world.

The workshop dealt with mass spectrometry-based analysis of protein phosphorylation and phosphoproteomics in general. Armand got the chance to listen and talk to international renowned speakers in the field of mass spectrometry.



Two Undergraduate Students Entered the International Poster Competition Held by ASMS



Kelly L. Wormwood and Katherine Beglinger will compete for the best undergraduate poster award at the ASMS 2013 meeting to be held in Minneapolis, MN. The undergraduate competition is competitive and limited to a very limited number of posters per year. Both Kelly and Katherine/Katie work together with another undergraduate student Jarrod W. Mattingly, Armand and Izabela, and also with Drs. Urmi Roy and Alisa G. Woods. Their focus is identification of saliva biomarkers in children with Autism Spectrum Disorder.

Kelly and Katie's abstracts (and posters) will also be presented at the Spring Undergraduate Research Symposium at Clarkson (April, 2013)

Shire Pharmaceuticals, LLC, Awards \$38,000 to Darie Lab for Autism Biomarker Research



The Darie Lab for Biochemistry and Proteomics has been awarded a \$38,000 grant to study salivary protein biomarkers by Shire Pharmaceuticals, LLC. The laboratory received an Investigator-Sponsored Trial grant and will work in collaboration with Dr. Jeanne Ryan of the State University of New York to further identify biomarkers that are present in the saliva of children with DSM-diagnosed ASDs compared to sibling-matched control participants. Shire Pharmaceuticals, LLC, has offices in Wayne Pennsylvania, Baskinstoke UK, and Nyon, Switzerland.

According to the mission statement of Shire Pharmaceuticals, LLC, the company strives to "enable people with life-altering conditions to lead better lives...to be the company that imagines and leads the future of healthcare for people with life-altering conditions, creating value for society."

Contact Information and About Us

Feel free to contact us with questions, comments or requests for information. Also, if you or a family member would like to participate in a study, we will be potentially recruiting children with autism spectrum disorders, fragile X syndrome or non-affected controls. Let us know if you'd like to get on our list of potential subjects and contribute to research in autism and developmental disorders.

Contact: Dr. Alisa G Woods
awoods@clarkson.edu
315 244-7178

Website: <http://people.clarkson.edu/~cdarie/index.html>
Facebook: <https://www.facebook.com/#!/darie.lab.16?fref=ts>

NPR show about our work!
<http://wrvo.org/post/clarkson-team-hopes-autism-research-could-lead-earlier-diagnosis>